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International Treaty
on Plant Genetic Resources
for Food and Agriculture

The Benefit- sharing Fund

2022–2023 REPORT

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ABBREVIATIONS

BSF	Benefit-sharing Fund
BSF-4	Fourth project cycle of the Benefit-sharing Fund
BSF-5	Fifth project cycle of the Benefit-sharing Fund
BSF Manual	Operations Manual: Benefit-sharing Fund
CBD	Convention on Biological Diversity
CfPs-5	Fifth Call for Proposals of the Benefit-sharing Fund
CoP	community of practice
FAO	Food and Agriculture Organization of the United Nations
Funding Committee	Standing Committee on the Funding Strategy and Resource Mobilization
GBF	Global Biodiversity Framework
GIAHS	Globally Important Agricultural Heritage System
GLIS	Global Information System
International Treaty	International Treaty on Plant Genetic Resources for Food and Agriculture
Multilateral System	Multilateral System of Access and Benefit-sharing
Panel	Independent Panel of Experts
NARS	national agricultural research system
NGO	non-governmental organization
PGRFA	plant genetic resources for food and agriculture
SDG	Sustainable Development Goal



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ABOUT

The International Treaty

The International Treaty on Plant Genetic Resources for Food and Agriculture (International Treaty) is a legally binding international agreement on the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) and the fair and equitable sharing of benefits arising from their use, in harmony with the Convention on Biological Diversity (CBD). Hosted by the Food and Agriculture Organization of the United Nations (FAO), the International Treaty is a fully operational global system mandated by 150 Contracting Parties.

The Benefit-sharing Fund

The Benefit-sharing Fund (BSF) is an essential element of the International Treaty's Funding Strategy¹ and of its Multilateral System of Access and Benefit-sharing (Multilateral System).²

The BSF is a funding mechanism that supports projects in developing countries for small-scale farmers to improve livelihoods, food security and adaptation to climate change. This is achieved by enhancing the on-farm management and improvement of plant genetic diversity, strengthening local value chains and supporting communities of practice to conserve and sustainably use plant genetic materials and related knowledge.

Established by the Governing Body and operational since 2009, the Benefit-sharing Fund has supported actions in 67 developing countries through four project cycles, with each cycle building on lessons learned and good practices from the previous ones.

In 2023, the Funding Committee approved a new portfolio of 28 projects to be funded in the Fifth Call for Proposals of the Benefit-sharing Fund (CfPs-5),³ which will start the implementation phase during 2023–2024.

A global agenda

The International Treaty is part of a global agenda on biodiversity.

The adoption of the Global Biodiversity Framework (GBF) presents a further opportunity to strengthen implementation of the International Treaty, as actions to conserve, share and use plant genetic diversity to contribute to the implementation of a wide range of GBF goals and targets.⁵ The Benefit-sharing Fund, through its funded projects, contributes to the achievement of the United Nations Sustainable Development Goals (SDGs), including SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 13 (Climate action), SDG 15 (Life on land), and SDG 17 (Partnerships for the Goals).

This report

This report provides a summary of the main steps taken to approve the new portfolio to be funded in the fifth project cycle of the Benefit-sharing Fund (BSF-5), including an overview of the approved projects.

It also gives an account of the main results and good practices arising from the implementation of ongoing projects and contains updates on relevant communication, governance and financial aspects. The report covers the period from September 2022, when the Ninth Session of the Governing Body was held, to June 2023. Regular reports on the Benefit-sharing Fund operations and programme are provided to the *Standing Committee on the Funding Strategy and Resource Mobilization* (the Funding Committee) of the International Treaty.⁶

¹ www.fao.org/plant-treaty/areas-of-work/funding/en/

² www.fao.org/plant-treaty/areas-of-work/the-multilateral-system/landingmils/en/

³ www.fao.org/plant-treaty/areas-of-work/benefit-sharing-fund/fifth-cycle/en/

⁴ www.cbd.int

⁵ www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf

⁶ www.fao.org/plant-treaty/areas-of-work/funding/en/

MESSAGE FROM THE SECRETARY



This report covers the progress in the Benefit-sharing Fund since the Ninth Session of the Governing Body, which was held in India in September 2022. The meeting of the Governing Body occurred at a crucial time for the global governance of biodiversity and for the future of the International Treaty. In India, the Governing Body relaunched negotiations to enhance the functioning of the International Treaty's Multilateral System of Access and Benefit-sharing (Multilateral System).

It reports on results of implementation of projects funded in the fourth project cycle of the Benefit-sharing Fund (BSF-4), as well as the initial steps for the operationalization of the fifth project cycle of the Benefit-sharing Fund (BSF-5). It also provides information about the process of setting higher ambitions for the standards and outcomes of BSF-5 delivery and corresponding programme support from the Secretariat.

The Ninth Session of the Governing Body was preceded by the opening of the Fifth Call for Proposals of the Benefit-sharing Fund, in May 2022. The fifth cycle of the Benefit-Sharing Fund is the first cycle to fully benefit from a series of decisions made by the Governing Body and its Funding Committee, to improve the programming and operations of the BSF. This new cycle incorporates a series of innovations outlined in the BSF Operations Manual adopted by the Governing Body, including funding a second phase of projects from previous cycles to leverage good results and scale out good practices and lessons learned. It is also the first cycle to systematically implement a programmatic approach with an overall Results Framework to which all funded projects contribute and a comprehensive Monitoring, Evaluation and Learning framework. The months following the Session entailed intense efforts to identify the 28 project proposals to be funded in BSF-5 from an initial set of more than 250 pre-proposals received. I want to convey my gratitude to all the applicant partners, the Independent Panel of Experts and the members of the Funding Committee for their efforts and commitment to make this happen.

In December 2022, the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity adopted the Kuming-Montreal Global Biodiversity Framework. The framework stressed that biodiversity is fundamental to human well-being and a healthy planet. However, despite ongoing efforts to conserve biodiversity, it is deteriorating worldwide, at rates unprecedented in human history.

Urgent and transformative action is required to halt and reverse biodiversity loss. The GBF was developed with a view to promoting cooperation between the CBD and other biodiversity-related conventions, such as the International Treaty.

Implementation of the GBF at national and other levels should provide impetus to strengthen implementation of the International Treaty. The GBF has set several ambitious targets to maintain and restore genetic diversity of cultivated species (Target 4), to take effective measures to ensure the fair and equitable sharing of benefits (Target 13), and to substantially increase the application of biodiversity-friendly practices in agriculture (Target 10), to name but a few. The Benefit-sharing Fund can make positive contributions to the realization of these and other GBF targets. The CBD Conference of the Parties has identified the Benefit-sharing Fund as one of the international funding mechanisms from which to draw lessons learned for the establishment of a multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources.

The United Nations declared 2023 as the International Year of Millets. Several projects of the Benefit-sharing Fund are enabling access to crop varieties of millets, sorghum and other small grains that are making a comeback due to their potential to contribute to several challenges, such as malnutrition and climate adaptation.

As part of the International Year of Millets, FAO has featured stories of farmers participating in Benefit-sharing Fund projects and the benefits of cultivating and consuming millets. One such story is that of Pudi Soren, a young woman farmer involved in a project supported by the BSF in India. She participated in the opening ceremony of the Ninth Session of the Governing Body and described how her life was impacted through her involvement in the BSF project. She told the meeting: “Rainfall is reducing. Thankfully, Mandua [millet variety] can be grown with less water.”

Donors and the wider international Treaty community have welcomed the efforts to communicate success stories arising from the Benefit-sharing Fund. It is my turn now to thank all donors and partners who have generously contributed to advancing the work of the Benefit-sharing Fund.

Kent Nnadozie

Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture





OUTREACH

Since its adoption, the BSF has supported actions in a wide range of Contracting Parties of the International Treaty.

AFGHANISTAN • ALBANIA • ALGERIA • **ANTIGUA AND BARBUDA** • ARGENTINA • BANGLADESH • BELIZE • BENIN • BHUTAN • BRAZIL • BULGARIA • BURKINA FASO • **BURUNDI** • CAMBODIA • **CHILE** • COOK ISLANDS • COSTA RICA • CUBA • DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA • **DEMOCRATIC REPUBLIC OF THE CONGO** • ECUADOR • EGYPT • EL SALVADOR • **ESWATINI** • ETHIOPIA • FIJI • **GEORGIA** • GHANA • GUATEMALA • HONDURAS • INDIA • INDONESIA • ISLAMIC REPUBLIC OF IRAN • IRAQ • **JAMAICA** • JORDAN • KENYA • KIRIBATI • LAO PEOPLE'S DEMOCRATIC REPUBLIC • LEBANON • **LESOTHO** • MALAWI • MALAYSIA • MALI • MARSHALL ISLANDS • MEXICO • MOROCCO • **MOZAMBIQUE** • NAMIBIA • NEPAL • NICARAGUA • NIGER • NIGERIA • PALAU • PANAMA • PAPUA NEW GUINEA • PARAGUAY • PERU • PHILIPPINES • **PLURINATIONAL STATE OF BOLIVIA** • RWANDA • **SAINT LUCIA** • SAMOA • SENEGAL • SERBIA • **SOUTH SUDAN** • SUDAN • SYRIAN ARAB REPUBLIC • UNITED REPUBLIC OF TANZANIA • TONGA • TUNISIA • TÜRKIYE • UGANDA • URUGUAY • VIET NAM • YEMEN • ZAMBIA • ZIMBABWE

This overview has been compiled from the participating countries in five calls for proposals of the Benefit-sharing Fund (2009–2023). Countries in bold are those participating for the first time in the Benefit-sharing Fund through BSF-5.



170

Around **170** repositories of local seed diversity have been established, including community seed banks.

1 MILLION

The BSF has facilitated the multistakeholder partnerships of **500** institutions reaching more than **1 million** people



6 300

More than **6 300** plant genetic resources, including landraces and underutilized crops, have been collected by partners.

200

More than **200** Farmer Field Schools have been established as interactive, bottom-up learning platforms to deploy, assess and develop climate-resilient crops in farmers' fields.

ROLLING IMPACT AT A GLANCE (2009–2023)

Since the Benefit-sharing Fund is integral to the implementation of the International Treaty, the resulting PGRFA materials and capacity building from BSF projects continue to be shared and used after the projects' implementation period. The nature of the BSF funding mechanism enables the management of PGRFA materials with immediate, medium- and long-term conservation and sustainable use.

The activities funded through the BSF support dynamic interaction between PGRFA and local to global food systems. The BSF facilitates access to and use of PGRFA to contribute to seed security, improved livelihoods and climate resilience for smallholder farmers. These are essential to food and nutrition security.

Moreover, the BSF plays a catalytic role in the exchange of a wide diversity of plant genetic materials, given global

interdependence on PGRFA. To this end, throughout four project cycles, the BSF has facilitated the multistakeholder partnerships of **500** institutions to cooperate in **81** BSF projects in **67** developing countries, reaching more than **1 million** people. These projects have enabled access to and the testing and development of **31 000** plant genetic materials and generated **20 000** new materials in the Multilateral System, which in turn have been made available to plant breeders and farmers. In this way, the BSF has helped to bring the continuing process of accessing PGRFA full circle, which in turn generates new PGRFA for the benefit of the global community.

More than **6 300** plant genetic resources, including landraces and underutilized crops, have been collected by partners. Around **170** repositories of local seed diversity have been established, including community seed banks. Most materials are also stored in national gene banks

and some collections are stored in international gene banks and in the Svalbard Global Seed Vault.

Given the complexity of responding to the diversity of needs and preferences of small-scale men and women farmers, the **31 000** plant genetic materials mentioned above have been tested in multiple locations, and in various agroecologies and cultures. The testing of plant materials in multiple locations benefits research and breeding institutions and provides valuable technical data and feedback. In return, farmers benefit through the development of **400** new varieties to meet their needs and preferences in terms of taste, nutrition, productivity and economic and cultural values. More than **200** Farmer Field Schools have been established as interactive, bottom-up learning platforms to deploy, assess and develop climate-resilient crops in farmers' fields.

400

400 new varieties have been developed to meet farmers needs and preferences in terms of taste, nutrition, productivity and economic and cultural values.



20 000

20 000 material made available in the Multilateral System.

31 000

31 000 plant genetic materials have been tested in multiple locations, and in various agroecologies and cultures.



FIFTH PROJECT CYCLE GOVERNANCE AND OPERATIONS IN PRACTICE

In 2019, the Governing Body of the International Treaty made a number of decisions on the governance and operations of the BSF. Such decisions were reflected in the new *Operations Manual: Benefit-sharing Fund (BSF Manual)*, which was adopted through Resolution 3/2019.⁷

The BSF comes under the direct control of the Governing Body, which now delegates the authority for its operations during the biennium to the *Standing Committee on the Funding Strategy and Resource Mobilization* (the Funding Committee). The Funding Committee, which includes representatives of Contracting Parties from all regions, may launch new project cycles, as needed, and decides on funding modalities from those available in the BSF Manual and on the final selection of new projects for funding.

An Independent Panel of Experts (the Panel), consisting of two experts from each of the FAO regions, is responsible for the screening and review of the eligible project proposals.⁸ Based on the work done by the Panel, the Funding Committee approves the projects to be funded at each cycle of the Benefit-sharing Fund.

The Secretariat of the International Treaty facilitates the work of the Funding Committee and the Panel. It delivers a Help-desk service at each call for proposals to support applicants to the BSF with technical information and guidance for project development and submission. Jointly with the FAO Office of Evaluation, the Secretariat plans and prepares an independent evaluation, which takes place at the end of each project cycle. The Secretariat is also responsible for the operations and management of the BSF programme, including administration of this funding mechanism.

7: Annex 2 of Res.3/2019: Operations Manual: Benefit-sharing Fund, available at www.fao.org/3/nb780en/nb780en.pdf#page=15

8: For more information on the composition and terms of reference of the Panel of Experts for the Fifth Call for Proposals, visit www.fao.org/plant-treaty/areas-of-work/benefit-sharing-fund/panel-of-experts-bsf-5/en/

The initial steps taken to implement the BSF fifth project cycle offer a glimpse on how the new *BSF Manual* works in practice. At the beginning of 2022, the Funding Committee provided guidance to enable the launch of the Fifth Call for Proposals of the Benefit-sharing Fund.⁹ In doing so, it decided to use one of the new modalities for funding introduced by the Governing Body in the *BSF Manual* by including funding for a second phase of projects from previous cycles, to leverage positive results and scale out good practices and lessons learned beyond an individual project cycle.

A total of 251 pre-proposals were submitted as part of the Fifth Call for Proposals of the BSF, and 173 eligible pre-proposals were screened by the Panel. A series of regional webinars was organized to support Panel members in their work. The results of the screening process were submitted to the Funding Committee, which approved a list of 34 pre-proposals and invited the respective applicant institutions to develop a full project proposal. Regional help-desk webinars were organized by the Secretariat and involved more than 100 participants, in order to build capacity to prepare a full project proposal.

The Final Report of the Panel of Experts – Fifth Call for Proposals – was submitted to the Funding Committee.¹⁰ At its seventh meeting (5–7 May 2023), the Funding Committee approved a list of 28 new projects for funding in BSF-5.¹¹ “It has been very interesting to be a part of the process that led to the approval of BSF-5 projects and the Funding Committee has expressed its appreciation for the transparency and efficiency of the work undertaken,” said the co-chair of the Funding Committee Katlyn Scholl. Co-chair Eric Bentsil Quaye added: “We are very pleased with the final portfolio of projects selected and see their potential to play a catalytic role in international cooperation in the area of plant genetic resources for food and agriculture.”

Another important governance process started with the decision of the Governing Body, at its Ninth Session, to re-establish negotiations to enhance the functioning of the Multilateral System of Access and Benefit-sharing. The Benefit-sharing Fund is an essential element of the Multilateral System, since it is the operational mechanism for receiving, utilizing and sharing the monetary benefits arising from the Multilateral System. As the BSF Manual specifies, user-based income from

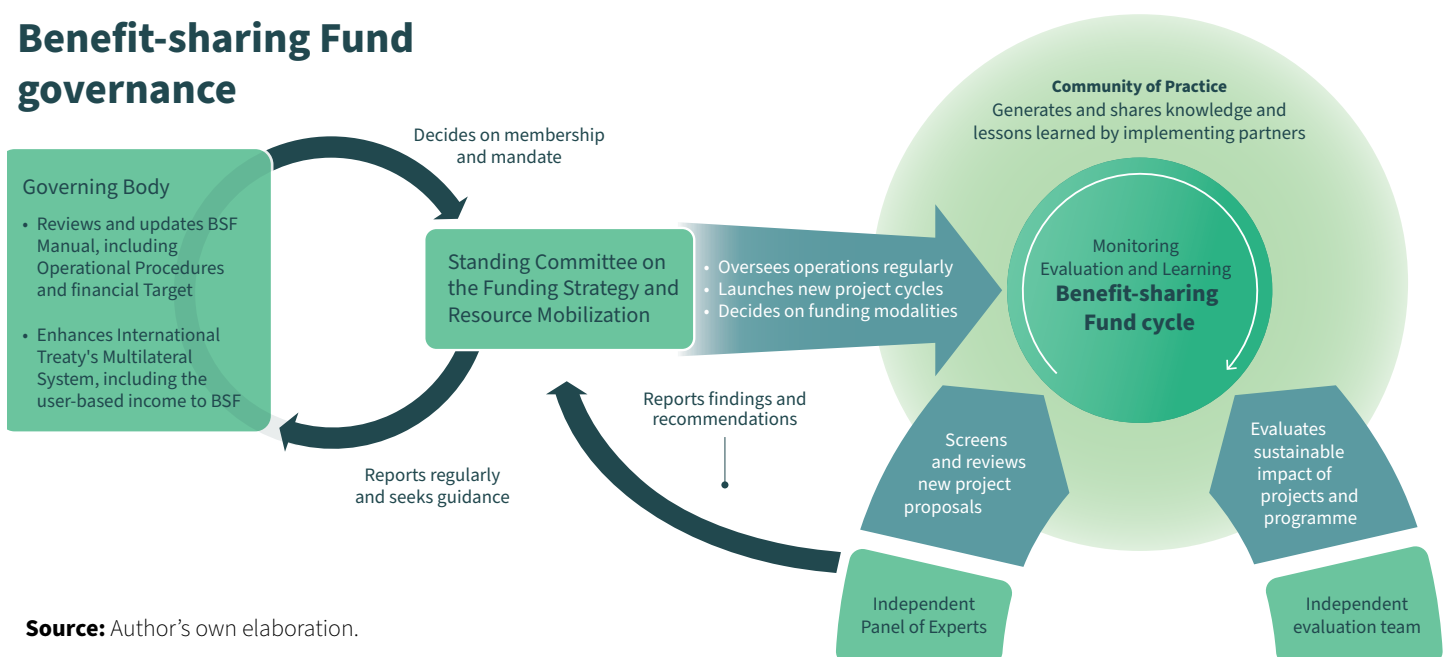
the Multilateral System is considered of paramount importance to the delivery of sustainable and predictable financial resources to the BSF. One of the shared purposes of the negotiation process is to increase user-based income to the Benefit-sharing Fund in a sustainable and predictable long-term manner. The Governing Body has established a negotiation process to be finalized by 2025.

⁹ The design of the BSF-5 programme took into account recommendations arising from the Independent Evaluation of the third project cycle of the Benefit-sharing Fund (BSF-3), available at www.fao.org/documents/card/en/c/cb8605en

¹⁰ IT/GB-10/SFC-7/23/Inf.3: Final Report of the Panel of Experts: Fifth Call for Proposals of the Benefit-sharing Fund, available at www.fao.org/3/cc5745en/cc5745en.pdf

¹¹ The list containing summary information on the BSF-5 portfolio of projects is available at www.fao.org/3/cc6021en/cc6021en.pdf

Benefit-sharing Fund governance



Source: Author's own elaboration.





OVERVIEW OF BSF-5 PROGRAMME

The fifth project cycle of the Benefit-sharing Fund will contribute to the further realization of the new programmatic approach adopted by the Governing Body. It has been designed to strike a better balance between providing financial support to several farmers' networks managing agrobiodiversity and activities that are by nature more transformative in terms of policy and capacities to deliver global public goods and services. This approach is also intended to build on mutual collaboration between different International Treaty stakeholders at different levels. All funded projects have to contribute to the new BSF Results Framework and follow a comprehensive Monitoring, Evaluation and Learning framework.

IMPACT



Farmers around the world use, conserve and share Plant Genetic Resources for Food and Agriculture (PGRFA) leading to increased productivity and on-farm incomes, increased availability of diverse nutrient-rich food, reduced adverse impacts to the environment and enhanced resilience to production shocks. Biodiversity for food security is safeguarded for the future.

OUTCOME

Livelihoods improved for small-scale farmers in developing countries, and food security and sustainable agriculture promoted, through the conservation and sustainable use of PGRFA

OUTPUTS

Adapted PGRFA managed or improved with farmers' participation

Enhanced local value chains improve production and consumption of adapted PGRFA

Mechanisms strengthened to enhance the sharing of PGRFA materials, data and knowledge

A focus on small-scale farmers

The Benefit-sharing Fund supports small-scale farmers in developing countries to improve their livelihoods, and to promote food security and sustainable agriculture through the conservation and sustainable use of plant genetic diversity.

Source: Author's own elaboration.

The BSF-5 portfolio of projects will work in 45 target countries, 14 of which have never received funding from the BSF, or have received limited funding in the past. This outcome is the result of a thorough screening and review process, which aimed to guarantee inclusiveness. It is also a reflection of the improved skills of new partners in developing good project proposals, especially for multi-country projects.

The BSF-5 portfolio has a budget of more than USD 10 million to be allocated for 28 projects, both for single-country and multi-country initiatives. The size of the projects varies from USD 250 000 for a duration of 18 months to USD 600 000 for a duration of 48 months.

For BSF-5, the Funding Committee decided to explore a new funding modality as contained in the *BSF Manual*. There are three multi-country second phase projects in BSF-5. By funding second phase projects, the BSF aims to further invest in advancing promising innovations that were achieved in the previous cycles, which are of strategic importance to the BSF goal and International Treaty implementation. It also aims to enable projects with a demonstrated track record to advance innovations towards impact and long-term outcomes.

All the approved proposals will work in marginal areas where local farming communities are facing increasing vulnerability due to climate change. All proposals involve farmers in activities relating to crop and varietal collection and conservation, characterization and assessment, testing, selection, enhancement and breeding.

The BSF-5 portfolio addresses a total of 52 crops, 60 percent of which are included in Annex I of the International Treaty.¹² All projects have a focus on PGRFA listed in Annex I of the International Treaty, but may include other crops if these are considered important for the development of adaptation and diversification strategies. The majority of

the projects focus on mixtures/packages of crops. BSF-5 partners plan to work with small grain crops, farmers' varieties, breeding lines or adapted varieties from international and national research programmes and farmer improved varieties.

The majority of projects funded (75 percent) are led by national organizations, including national agricultural research systems (NARS), government institutions, universities and academia, non-governmental organizations (NGOs) and civil society organizations. Around 25 percent are led by international organizations, mainly in the African region and mainly CGIAR Centers.

National organizations have demonstrated skills and know-how in developing multi-country projects, a reality that was mainly a prerogative of international organizations in previous BSF project cycles.

As recognized by the Panel, there are still some challenges in involving and building the skills of national institutions to develop and implement technically sound and well-developed proposals. Additional support in building capacities, skills and know-how in both drafting and implementing good project proposals is needed in some regions, and this requires a more systemic approach.

A programme-wide inception phase

In line with the BSF programmatic approach and following good practices of project management, BSF-5 will start with a programme-wide inception phase. The objective is for project stakeholders to reaffirm their commitments, review their project design and detail plans to collectively achieve the BSF programme outcome. This is part of the projects' strategy to build social capital and establish an evidence-based planning and Monitoring, Evaluation and Learning framework. The inception phase is intended to be a learning opportunity for adaptive coordination that contributes to delivering effective results, while

assessing and mitigating risks.

In particular, the inception phase will sharpen plans for identifying and engaging farmers and local communities, using a gender-inclusive approach. In many cases, a baseline and end line will be planned and executed for evidence-based diagnostics and planning, to address the PGRFA needs and preferences of men and women farmers. The inception period will also systematize plans for knowledge management and communication.

Community of practice

To strengthen synergies on PGRFA-related problem solving, and enable the sharing of concepts, tools and insights on good practices and lessons learned, BSF-5 will support a community of practice (CoP) at programme level. As part of BSF knowledge management, the Secretariat will consult with partners on their needs and expectations for the CoP. The tentative purposes of the CoP, pending consultations, are to: (1) learn from previous experiences and build on lessons learned; (2) facilitate access to and sharing of relevant concepts, tools and training; and (3) co-develop and share knowledge on PGRFA at project and programme levels. The experiences and results from the community of practice will be shared with wider stakeholder groups such the Contracting Parties and other PGRFA projects during (side) events, in FAO repositories, and through the International Treaty mechanisms and projects.

¹² Annex I of the International Treaty was established by the international community according to the importance of crops for global food security, as well as the interdependence of countries with regard to them. The Annex currently comprises 64 food crops and forages, accounting for almost 80 percent of dietary intake from plants.

HIGHLIGHTS OF IMPLEMENTATION OF BSF-4

The fourth project cycle has been operational since 2019 and, by mid-2023, 30 percent of projects had concluded their activities.¹³





Supported projects work in diverse agroecological systems with high vulnerability to climate change. Managing plant genetic diversity with farmers was factored in the BSF programme as instrumental in increasing PGRFA diversity, providing building blocks to researchers and breeders, and strengthening adaptive capacities and resilient livelihoods.

BSF-4 projects target crops of relevance for food security, adaptability to biotic and abiotic stresses, nutrition and income generation. The portfolio addresses a total of 38 different crops, 80 percent of which are included in Annex I of the International Treaty.¹⁴ While 30 percent of the projects focus on a single crop, 70 percent target mixtures/packages of crops.

Projects work with local varieties and with plant genetic materials accessed from the Multilateral System. A total of 47 percent of projects deal with crop improvement to increase the availability of disease-free, clean planting material.

BSF-4 aims to implement responsive and inclusive PGRFA strategies that cater to the diverse needs of farmers, including women and youth. At the time of writing this report, a total of 233 646 farmers, researchers, breeders, gene bank curators and government officials (67 944 of them women) had benefited from access to improved varieties, increased knowledge of agricultural practices, diversified local seed value chains, and the availability of crops that are nutritious and resistant to climate change. A total of 1 115 students have undertaken research and studies on PGRFA diversity, good agricultural practices, and the development of production manuals.

BSF projects are encouraged to make links with national and regional programmes on agrobiodiversity.¹⁵ All activities sponsored by the BSF-4 were designed to be consistent with national strategies and plans related to biodiversity and poverty reduction. Some 68 percent of the projects reported that relevant linkages had been established with existing national or international programmes.

BSF partners are encouraged to create synergies with other relevant programmes. For example, 9 out of the 20 BSF-4 executing partners are among the 40 successful applicants to the competitive grant scheme to support the backing up of crop diversity in the Svalbard Global Seed Vault. Grants are made possible under the Biodiversity for Opportunities, Livelihoods and Development project led by the Crop Trust.¹⁶

Supporting farmers in their management of plant genetic diversity

BSF partners work with a range of PGRFA that are either collected or accessed from farmers' fields, national gene banks, breeding institutes and international research institutions. To date, partners working in BSF-4 have characterized a total of 6 261 crop varieties and genotyped a total of 2 467 plant genetic materials. More than 1 049 crop varieties, including landraces and underutilized species, have been collected and a total of 376 varieties are being tested in farmers' fields for further participatory varietal testing and selection.

¹³ Please consult the BSF 2020–2021 Report (www.fao.org/3/cc2245en/cc2245en.pdf) to learn more about implementation progress through regional highlights.

¹⁴ Annex I of the International Treaty was established by the international community according to the importance of crops for global food security, as well as the interdependence of countries with regard to them. The Annex currently comprises 64 food crops and forages, accounting for almost 80 percent of dietary intake from plants.

¹⁵ The formats of full project proposals included a section entitled “Relevance to national or regional priorities in its plans and programmes for PGRFA”. All projects established links and reported on their contribution to PGRFA plans and priorities.

¹⁶ For more information, visit <https://bold.croptrust.org/focus-areas/safety-duplication-at-svalbard-global-seed-vault/>

Women as conservationists, food producers and knowledge holders of PGRFA

Throughout history, women have played important roles as guardians of agrobiodiversity. However, women tend to be marginalized and their contributions to PGRFA management often go unrecognized. The BSF works towards gender and social inclusion. Partners are encouraged to cultivate women's participation and leadership, such as in diagnosing and setting breeding objectives. Furthermore, the BSF encourages gender-disaggregated data gathering and analysis.

Women's roles and management practices for the conservation and improvement of PGRFA, as well as their intimate knowledge of household needs, are widely recognized and manifested in BSF projects. Women's perception of the importance and diverse use of crop varieties, including their nutritional value and as a source of income or medicine, make them important decision-makers in terms of PGRFA conservation and sustainable use.

Throughout BSF-4, around 68 000 women farmers (29 percent of total direct beneficiaries) had the opportunity to work with government breeders, researchers, agricultural extension officers and project staff in conducting Participatory Varietal Selection, Participatory Plant Breeding and Participatory Varietal Enhancement. Women often play an important role in setting breeding objectives by suggesting the preferred traits of target crops.

Reintroducing 20 local landraces of 7 strategic crops in farmers' fields

WARDAH MUS'D HASAN:

"In this area, we suffer from droughts and the ongoing war in Yemen has led to a horrible crisis," said farmer Wardah Mus'd Hasan of Abasir village in Dhamar, Yemen. "Since my participation in the project, I started cultivating new varieties of wheat. I prefer Bahuth 3, an improved wheat variety that we received from the national gene bank, for its drought and disease resilience. I want to establish a seed warehouse in my community, so we are less dependent on seeds that need to come from far, while we have many problems with infrastructure."

The project "Participatory conservation and sustainable use of local landraces to improve the livelihood and the resilience of farmers to climate change in Yemen", implemented by the National Genetic Resources Center of Yemen, has helped to reintroduce about 20 local landraces of 7 strategic crops in farmers' fields.



CASE: INDIGENOUS FARMERS COLLABORATING WITH RESEARCHERS IN ARGENTINA

In Argentina, links have been strengthened between gene banks, farmers and local and Indigenous communities. So far, 14 local maize varieties, 4 potato varieties and 32 local bean populations have been conserved at the National Agricultural Technology Institute and shared for participatory research with Indigenous communities.¹⁷

Support is given to different seed exchange fairs held in the northeast, northwest and northern Patagonia. These events serve for the exchange of seeds and associated knowledge, to build awareness of the importance of conserving farmer varieties, and of the role of producers in the conservation of agrobiodiversity. Such gatherings also enable the exchange of knowledge on cooking techniques and recipes that use local biodiversity, and on how to enhance local value chains.

In the Northwest region of Argentina, women belonging to the Indigenous communities of Tekoha Kaa Guy Poty have produced and multiplied 18 local varieties of Andean maize and 9 varieties of Andean potatoes. These crops are important locally for their nutritional value and adaptation, and for being part of tradition and culture.

Some 17 local varieties of maize are stored in a local community seed bank. This is one of 35 community seed banks established globally to date, as part of the BSF-4 cycle.¹⁸

In northern Patagonia, local groups of women farmers have conserved 13 varieties of beans and 5 varieties of maize *in situ*. Last year, the Gardeners' Group included two additional varieties to evaluate their adaptation to the area. Through participatory workshops led by women farmers, progress has been made

in the characterization of these varieties by producers, and in preparation for their conservation. The multiplication of locally adapted varieties to the particular conditions of each area is being conducted in producers' plots, with the aim of increasing the number of seeds available for their use and conservation, as well as for exchange with producers interested in incorporating new varieties or recovering those that have been lost.

In all activities, especially in the seed houses in northern Patagonia, the groups that manage the seeds and the community seed bank are entirely composed of women.

Women are also the main decision-makers when it comes to selecting food products to be prepared, and which varieties to use for cooking. Women of the *Unión de Organizaciones Campesinas e Indígenas de Cotacachi* (Union of Peasant and Indigenous Organizations of Cotacachi) – the Organization that implements the BSF-4 project in Ecuador: “Strengthening the Indigenous communities of Cotacachi-Ecuador in the conservation and use of PGRFA as a mechanism for the fair and equitable distribution of benefits” have compiled a book of recipes that use indigenous and local varieties of crops.



The project in Ecuador is working with the Indigenous communities of Kichwa in the district of Cotacachi. The district was recently recognized as a Globally Important Agricultural Heritage System (GIAHS) and the BSF, through its project, has supported partners in

their application and preparation for this recognition.¹⁹

Dynamic linkages strengthened between on-farm programmes and gene banks and others in agricultural research systems

The BSF links *in situ* and *ex situ* conservation in a mutually reinforcing way. So far, more than 1 049 plant genetic materials, often threatened landraces or underutilized crops, have been collected from various locations. These materials are being conserved and used in community seed banks and national gene banks.

In some cases, duplicate material is stored in international collections and in the Svalbard Global Seed Vault, as in the case of material deposited by two projects: “Providing seed producers with high-performing, drought-tolerant rice varieties adapted to rainfed rice-growing conditions” in Mali²⁰ and “Redesigning the exploitation of small grains genetic resources towards increased sustainability

of grain-value chain and improved farmers' livelihoods in Serbia and Bulgaria – GRAINEFIT”.²¹

¹⁷ For more information on the project “Conservation and sustainable use of local plant genetic resources for food and agriculture (PGRFA) to contribute to the food security of smallholder farmers in Argentina”, see Overview of projects’ on p. 26-31.

¹⁸ The term ‘community seed banks’ covers mainly informal institutions, which are locally governed and managed, and may also be known as seed houses, seed huts, seed wealth centres, seed savers groups, associations or networks, community seed reserves, or seed libraries.

¹⁹ For more information on the GIAHS site in Cotacachi, visit www.fao.org/gjahs/gjahsaroundtheworld/designated-sites/latin-america-and-the-caribbean/andean-chakra/en/

²⁰ www.fao.org/plant-treaty/news/news-detail/en/c/1392958/

²¹ www.fao.org/plant-treaty/news/news-detail/en/c/1447199/

For example, the BSF partner, the National Genetic Resources Center in Yemen, working on participatory conservation of local landraces, faced significant difficulties in accessing PGRFA material because its gene bank lacked sufficient quantity and quality of the material needed by the project. In addition, limited capacities and facilities were available at the gene bank to multiply the existing material for distribution to farmers.

Through the BSF-4 project, the Benefit-sharing Fund partners managed – despite the complex socioeconomic situation in the country – to collect more than 400 landraces and related traditional knowledge from Dhamar, Hadramout and Almarah governorates and to document and conserve them in the national gene bank. In addition, they reviewed and updated the national gene bank database, including correcting data for 500 genetic resource collection sites in terms of geographical coordinates, and soil and climate data.

Most importantly, an impressive campaign and petition were conducted by the BSF partner, the Genetic Resources Center

to revive the interest of the national authorities in the importance of PGRFA for food security, adaptation and resilience, and the need to set in place a National Programme for Genetic Resources in Yemen. Project partners organized workshops and consultations, and met national representatives from different ministries and directorates, as well as gene bank managers and agricultural officers, to raise awareness of the need to assess the state of genetic resources, with all their components, in Yemen and to develop a National Programme for Genetic Resources. As a result, a national mechanism for coordination and joint action at national level has been established and started working on the national strategy for PGRFA.

Sharing plant genetic resources, data and knowledge

Knowledge, information and germplasm generated through the Benefit-sharing Fund projects feed back into the International Treaty's enabling mechanisms. This helps to expand the PGRFA resources available worldwide to improve food security and sustainable agriculture.

The BSF showcases how the linkages of different initiatives, ranging from farming communities to national and international gene banks, are strengthened through the International Treaty. By helping farmers, at local levels, to find adaptive solutions to climate change and other challenges, the International Treaty contributes to strengthening agricultural diversity.

A dynamic flow of plant genetic materials

Responding to farmers' needs that were identified during the diagnostic exercises, 42 percent of BSF-4 partners accessed materials through the International Treaty's Multilateral System. These PGRFA were sourced from different gene banks and are being evaluated and improved through participatory research with farmers. In addition to the Multilateral System materials, many projects include local varieties from farmers' fields and collection missions.

CASE: INDIGENOUS FARMERS COLLABORATING WITH RESEARCHERS IN ARGENTINA



For example, the National Biodiversity Centre, which is responsible for implementation of the BSF project in Bhutan²², is currently working on the inclusion of 60 accessions of traditional rice varieties in the Multilateral System. This was preceded by a series of technical and policy consultations from local to national levels, and there are plans to further expand the collection of crops available in the Multilateral System.

Most of the BSF-4 projects have conducted awareness-raising and capacity-building activities with partners and their consortia, often with a wide range of national stakeholders, on practical use of the Multilateral System, the Global Information System for PGRFA management,²³ and on implementing the International Treaty. For example, the project in Argentina (see Case on page 24) organized workshops on implementing the International Treaty and working with Indigenous communities and family farming systems. Aside from awareness-raising, a ‘community protocol’ was developed, outlining models of collaboration between Indigenous communities, researchers and others for the protection of seeds, associated ancestral knowledge, use and commercialization.

Exchange of data and information

BSF-funded projects mutually benefit from and contribute to the International Treaty’s Global Information System on Plant Genetic Resources for Food and Agriculture (GLIS). Sharing PGRFA data and information increases the benefits that arise from the use of such resources. The provisions on PGRFA for BSF projects, as established by the Governing Body, stipulate that information arising from funded actions should be made publicly available within two years of a project’s conclusion. Project partners have built capacities to access and use tools and databases available in the GLIS. More than 89 618 Digital Object Identifiers (DOIs) have been assigned to PGRFA managed by BSF projects,²⁴ helping to provide access to information on seeds and other crop material for research, training and plant breeding.²⁵

In Ecuador, a project evaluated more than 800 materials of maize, beans and potatoes. Thirteen promising materials were identified that matched the needs, preferences and environmental conditions of participating communities. DOI numbers were assigned to 36 maize and bean resources. The PGRFA materials with adaptive traits have been reintroduced in Indigenous communities through seed multiplication processes, seed exchange fairs and gastronomy fairs. In addition, these materials are considered as part of biodiverse production systems that contribute to strengthening agritourism in communities.

Documentation and dissemination of knowledge in projects

Throughout 2022–2023, at programme level, the BSF strengthened partners’ capacities to document and disseminate knowledge on innovations for PGRFA management. Implementing partners have documented good practices and shared these as case studies, policy briefs and informative events. At project level, implementing partners have documented their findings and developed tools such as educational modules, production manuals, seed management guides and training courses that have been widely disseminated to various actors in the agriculture sector.



For example, the BSF-4 project in India produced a booklet and video series showcasing improved seed diversity and training in seed multiplication. These showed the impact on peoples’ livelihoods and personal situations. The booklet: *A small change makes a big difference: Adoption of seed biodiversity and multiplication*, contained seven case studies, and is available in English

and Hindi. It has been shared with project partners, scientists and partner organizations, as well as during events and meetings, to inform and inspire readers.

In Yemen, extreme droughts, war and economic and infrastructural stagnations have led to recurring food crises, combined with loss of crop diversity. In this complex context, the project “Participatory conservation and sustainable use of local landraces to improve the livelihood and the resilience of farmers to climate change in Yemen” succeeded in raising awareness of the importance of a diversity of plant genetic materials for food security, sustainable development and resilience, and in enhancing people’s livelihoods. The project included reinforcing the importance of PGRFA in national biodiversity planning and adaptation strategies and increasing the visibility and awareness of the International Treaty at national events. More than 200 men and women farmers were trained in seed and knowledge conservation strategies and improved agricultural production. In addition, 100 researchers from agricultural research stations and universities were trained in variety characterization and evaluation, use of information systems and applied biotechnology in the management and sustainable use of PGRFA.

²² For more information on the project “Participatory on-farm conservation, sustainable use and management of neglected and underutilized crop species (NUS) for livelihood and adaptation to climate change”, see ‘Overview of projects’ on p. 26-31.

²³ www.fao.org/plant-treaty/areas-of-work/global-information-system/en/

²⁴ <https://glis.fao.org/glis/>

²⁵ For more information on DOIs resulting from BSF projects, see <https://glis.fao.org/glis/stats/by-project>


The benefits of sorghum, millets and other small grains

ANALYCE CHIDEMBO

“Many people in my area have shunned small grains such as millets, because the processing is labour intensive,” said Zimbabwean farmer Analyce Chidembo. “But when the maize fails because of poor rains, I can still harvest millets that mature much quicker. I’m trying different varieties. Last year I got *Svoboda*, a finger millet variety that is less damaged by pests and can be preserved for years.” Chidembo is a lead farmer in a Farmer Field School. She learned about new potential varieties in Seed Fairs organized by the Benefit-sharing Fund project “Policies and Practices to Facilitate the Implementation of Developed Strategies Actions for Plant Genetic Resources Conservation and Use for the Improvement of Food and Nutrition under Changing Climatic Conditions”.







COMMUNICATION AND VISIBILITY

As recommended by the Independent Evaluation of the third project cycle of the Benefit-sharing Fund, giving visibility to innovations and results from BSF projects is key to the success and sustainable impact of the Benefit-sharing Fund programme. This includes raising awareness of the importance of plant genetic diversity for improved livelihoods, sustainable agriculture and food and nutrition security in the context of climate change.

During 2022–2023, the Secretariat, with guidance from the Funding Committee, enhanced the visibility of the BSF and reached out to a larger and broader audience. The increased emphasis on communication and visibility was requested by donors and several PGRFA community stakeholders, to promote better understanding of BSF projects' benefits to local farming communities and how these could be scaled up in future.

The Secretariat has supported BSF projects to communicate their results and stories to national and regional audiences. This support was considered extremely useful by project partners and will be further developed in collaboration with BSF-5 partners. Meanwhile, personal stories, knowledge and statistics on impact have been used in compelling narratives to increase the visibility of the International Treaty and its Benefit-sharing Fund.

Engaging local, national and regional audiences

Benefit-sharing Fund projects work with a communication strategy that aligns with the BSF programme-level outcome and reaches out to the right audiences at the right place and time. For example, in 2022–2023, many projects organized events for large and diverse audiences, such as seed diversity and food fairs, field visits and biodiversity festivals, to exchange seeds and knowledge on PGRFA, including potential uses of these varieties. Projects also participated in national and regional dialogues and policy fora organized by universities, civil societies or government institutions, where they presented results and good practices to influence policies, research priorities and planning. While such diversity fairs and dialogues are important for seed and knowledge exchange and policy support, the BSF projects have strengthened their communication plans for greater outreach and visibility.



For example, the project in Uruguay promotes knowledge and use of agrobiodiversity in family farming, to reconnect farmers to a diverse range of resilient, adapted and improved varieties that originate from the region.²⁶ In 2022, the project reached out to a large group of indirect beneficiaries through various means, including via its own YouTube channel and other social media platforms. BSF partners and stakeholders worked with farmers to produce manuals and a cookbook based on indigenous and nutritious ingredients. At the same time, representatives of producer organizations involved in the project shared results on national and international fora, including at the International Symposium on Genetic Resources for the Americas and the National Committee for Plant Genetic Resources. This dual approach of reaching out to farming communities and speaking to national and international stakeholder groups has been adopted by several BSF-4 funded projects.



Another interesting visibility opportunity for projects in 2023 has been the United Nations International Year of Millets. A project in Uganda and Zimbabwe²⁷ oriented its research towards identifying qualities in millets and sorghums that meet market needs. With organic sorghum syrup, millet-based lager beers and potential non-food products, such as bio-based plastics,

researchers and farmers attracted food processing companies and participated in innovation fora and exhibits at universities. The project contributed to the 2023 UN International Year of Millets by raising awareness of the nutritional and health benefits of these grains and their resilience, which allows them to be cultivated under adverse and changing climatic conditions. Farmers and project stakeholders have shared their success stories on several platforms and published scientific articles, blogs and production manuals.

The BSF Secretariat has provided all projects with a communication toolkit, which they can adapt to their own context and priorities. The toolkit includes templates, guidelines per type of product and activity, branding elements and practical documents to support product development, such as creating concise video messages, conducting interviews and writing photo captions. The toolkit also supports collaboration, and partners can upload materials to receive feedback and showcase their work to fellow BSF projects in the same cycle. In 2023, the toolkit was updated with additional resources and documents and more language versions in Arabic, French and Spanish.

Engaging the global community

Lessons learned, knowledge and evidence from local, national and regional levels have informed communication efforts at global level. The goal is to increase the visibility of the BSF and the outreach of the International Treaty. Some highlights of the communication efforts during this intersessional period are presented here.



Source: FAO. 2022. *Sharing the benefits of plant genetic diversity: the Benefit-sharing Fund*. Rome. <https://www.fao.org/documents/card/en/c/cc2098en/>



Source: FAO. 2022. *The Benefit-sharing Fund Report 2020-2021*. Rome. <https://doi.org/10.4060/cc2245en>



During the Ninth Session of the Governing Body of the International Treaty, in relation to the BSF, the Secretariat launched a brochure, report and major exhibition, with material gathered from projects implemented in Ecuador, India, Malawi, Serbia and Yemen. The products were co-produced with partners and featured impact figures, photos, videos and human interest stories, as well as insights into the contribution of the BSF projects to improved livelihoods and the adaptive capacities of local communities. These materials have been key in reaching out to wider audiences and have been reused in various exhibitions and outlets.



Achievements of the BSF have been celebrated with global outreach, for example, when Serbian researcher and project coordinator Sanja Mikic was nominated as a ‘Food Hero’ in an FAO campaign for her contribution to Serbia’s collection of wheat, oat and barley genetic resources.²⁸ Similarly, the BSF-3 Ecuador project featured in a documentary by Food Hero and world famous chef Joan Roca.²⁹ Other projects, such as those from Malawi and Zambia,³⁰ and Papua New Guinea,³¹ have been highlighted as ‘innovation stories’ in the run-up to the FAO Science and Innovation Forum 2023.³²

The BSF has also contributed to the International Year of Millets celebrations by developing a feature story on the project in India, which was published on the FAO homepage and disseminated to a wide audience in six languages.³³ The protagonist, woman farmer Pudi Soren, started cultivating millets, oilseeds and pulses following her participation in a Benefit-sharing Fund project. These seeds had been lost to her community 15 years earlier. Pudi also shared her story and talked about the project in her opening address to the Ninth Session of the Governing Body.

In light of the International Year of Millets celebrations, a delegation from the Government of Italy and research organizations, including civil society organizations, and the Secretariat visited Zimbabwe in March 2023. The group toured BSF project sites and met with farmers, practitioners, researchers and government representatives, including Deputy Minister for Lands, Agriculture, Fisheries, Water and Rural Development Vangelis Peter Haritatos. The visit was covered by national and international



Ms Pudi Soren, participating in a BSF project in India, speaks to the delegates gathered for the Governing Body session in New Delhi.

media, enhancing visibility for millets, the achievements of the projects, and the International Treaty.³⁴

As a result of these communication efforts, the BSF and the International Treaty have

strengthened their support to smallholder farmers, reinforcing their motivation to conserve plant genetic resources under the global mechanisms of access and benefit-sharing by highlighting the benefits to a wider audience.

²⁶ For more information on the project “Articulation of the national governance and collective management of genetic diversity and its associated knowledge in family and peasant agriculture in Uruguay”, see ‘Overview of projects’ on p. 26-31.

²⁷ For more information on the project “Exploring wide crosses derived crop biodiversity (sorghum x maize) for climate resilience and food and nutrition security in Eastern and Southern Africa”, see ‘Overview of projects’ on p. 26-31.

²⁸ www.youtube.com/watch?v=afSnSecABVg

²⁹ www.bbva.com/en/sustainability/bbva-and-el-celler-de-can-roca-launch-seeds-for-the-future-an-initiative-to-raise-awareness-about-the-relationship-between-food-and-environmental-protection/

³⁰ www.fao.org/science-technology-and-innovation/resources/stories/detail/shifting-crops-to-adapt-to-changing-climate-conditions-in-malawi/en

³¹ www.fao.org/science-technology-and-innovation/resources/stories/innovative-sweet-potato-breeding-and-conservation-in-papua-new-guinea-with-anno-darkop/en

³² www.fao.org/science-technology-and-innovation/science-innovation-forum-2023/en

³³ www.fao.org/fao-stories/article/en/c/1635790/

³⁴ See for example www.voanews.com/a/zimbabweans-turning-to-small-grains-to-beat-climate-change/7022761.html, impactstories.co.zw/index.php/2023/03/24/international-year-of-millets-a-global-opportunity-to-direct-attention-to-health-and-nutritional-benefits-of-millets-fao/ and www.herald.co.zw/government-working-on-promoting-biodiversity/amp/

OVERVIEW OF PROJECTS

For detailed information on the projects funded by the Benefit-sharing Fund: www.fao.org/plant-treaty/areas-of-work/benefit-sharing-fund/projects-funded-new/en/



FOURTH CALL FOR PROPOSALS OF THE BENEFIT-SHARING FUND

Title	Targeted countries	Executing institution	Crops addressed	Amount USD
AFRICA				
National community seed bank platform for strengthening informal seed systems in Ethiopia	Ethiopia	Ethiopian Biodiversity Institute	Wheat, barley, sorghum, finger millet, oat, faba bean, chickpea, field pea, grass pea	250 000
Harnessing dryland legume and cereals genetic resources for food and nutrition security and resilient farming systems in Malawi and Zambia	Malawi, Zambia	International Crops Research Institute for the Semi-Arid Tropics	Groundnut, pigeon pea, sorghum, millet	450 000
Varietal diversity for greater community resilience in the Sahel	Burkina Faso, Mali, Niger	Commission Nationale de Gestion des Ressources Phytogénétiques (CONAGREP) du Burkina Faso	Millet, sorghum, cowpea, bambara nut	450 000
Exploring wide crosses derived crop biodiversity (sorghum x maize) for climate resilience and food and nutrition security in Eastern and Southern Africa	Uganda, Zimbabwe	National Livestock Resources Research Institute (NaLIRRI)	Sorghum, pearl millet	449 998
Providing seed producers with high-performing, drought-tolerant rice varieties adapted to rainfed rice-growing conditions	Mali	Institut d'Economie Rurale, Centre Régional de Recherche Agronomique de Sikasso (CRR)	Rice	241 153
Evaluation of Berseem clover (<i>Trifolium alexandrinum</i> L.) genetic resources under different ecosystems using traditional and genomic approaches	Egypt	Agricultural Genetic Engineering Research Institute (AGERI), ARC, Egypt	Berseem clover	250 000
Improving livelihoods of smallholder farmers through increased bean productivity, production and income in Zambia	Zambia	Zambia Agriculture Research Institute	Beans	250 000
GRULAC				
Strengthening the Indigenous communities of Cotacachi-Ecuador in the conservation and use of PGRFA as a mechanism for the fair and equitable distribution of benefits	Ecuador	Unión de Organizaciones Campesinas e Indígenas de Cotacachi - UNORCAC	Maize, potatoes, beans	250 000
Strengthening community resilience in two Cuban biosphere reserves through the efficient use of plant genetic resources of maize and beans	Cuba	Instituto de Investigaciones Fundamentales en Agricultura Tropical "Alejandro de Humboldt" (INIFAT)	Maize, beans	249 900
Conservation and sustainable use of local plant genetic resources for food and agriculture (PGRFA) to contribute to the food security of smallholder farmers in Argentina	Argentina	Instituto Nacional de Tecnología Agropecuaria	Maize, potatoes, beans	250 000
Articulation of the national governance and collective management of genetic diversity and its associated knowledge in family and peasant agriculture in Uruguay	Uruguay	Red Nacional de Semillas Nativas y Criollas; Red de Agroecología del Uruguay; Comisión Nacional de Fomento Rural	Peanut, beans, cowpea, maize, peas, apple, pear, peach, guave, araza, festuca, soybean, wheat, buckwheat, sorghum	248 400

Title	Targeted countries	Executing institution	Crops addressed	Amount USD
ASIA				
Conservation and sustainable utilization of underutilized taro to increase food security and livelihoods of marginalized communities faced with climate change	Malaysia, Indonesia, Philippines, Fiji	Malaysia Agriculture Research and Development Institute (MARDI)	Taro	450 000
Improving pulse biodiversity in rice fallow areas of tribal belts of Central and East Indian states to bring resilience in the farming practice, provide livelihood support and enhance nutritional level of the tribal population	India	PAIRVI (Public Policy Initiatives for Rights and Values in India)	Pulses, oilseeds	215 481
Participatory on-farm conservation, sustainable use and management of neglected and underutilized crop species (NUS) for livelihood and adaptation to climate change	Bhutan	National Biodiversity Centre, Ministry of Agriculture and Forests	Neglected and underutilized crop species, millets	250 000
EUROPE				
Redesigning the exploitation of small grains genetic resources towards increased sustainability of grain-value chain and improved farmers' livelihoods in Serbia and Bulgaria - GRAINEFIT	Serbia, Bulgaria	Institute of Field and Vegetable Crops	Wheat, barley, rye, oat	450 000
Identification, evaluation and genetic improvement of some local crop varieties to face with impact of climate change, increase the productivity, food security and on-farm incomes, for poor farmers in remote mountainous areas in Albania	Albania	Agricultural University of Tirana	Maize, beans	100 000
NEAR EAST				
Participatory conservation and sustainable use of local landraces to improve the livelihood and the resilience of farmers to climate change in Yemen	Yemen	Agriculture Research and Extension Authority.	Sorghum, maize, millet, wheat, barley, lentil, beans, pea, cowpea	247 500
Strengthening national capacities and regional integration for efficient conservation of plant genetic resources in a post-conflict region	Lebanon, Iraq, Syrian Arab Republic	International Center for Agricultural Research in the Dry Areas (ICARDA)	Barley, wheat, lentil, chickpea, faba bean	446 408
SOUTHWEST PACIFIC				
In situ conservation and utilization of sweetpotato (<i>Ipomoea batatas</i>) and taro (<i>Colocasia esculenta</i>) for climate smart agriculture vulnerable farmers in Papua New Guinea	Papua New Guinea	National Agricultural Research Institute	Sweet potato, taro	245 030
Safeguarding threatened coconut diversity within the upgraded International Coconut Genebank for the South Pacific	Fiji, Papua New Guinea, Samoa	The Pacific Community (SPC), Suva, Fiji	Coconut	450 000

Source: Author's own elaboration

FIFTH CALL FOR PROPOSALS OF THE BENEFIT-SHARING FUND

Title	Targeted countries	Executing institution	Crops addressed	Amount USD
AFRICA				
Harnessing grain legumes and dryland cereals genetic resource for resilient farming systems, food and nutrition security in Malawi, Zambia and Mozambique	Malawi, Zambia, Mozambique	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)	Groundnut, millets, sorghum, chickpea, pigeonpea	600 000
Varietal diversity: an opportunity for populations vulnerable to food insecurity and climate change in the Sahel	Burkina Faso, Niger	Alliance of Bioversity international and CIAT	Millet, sorghum, cowpea, fonio, bambara groundnut	563 895
Revealing the diversity of barley quality traits through synergies between on-farm practices and technological innovations	Ethiopia, Morocco, Tunisia	International Center for Agricultural Research in the Dry Areas (ICARDA)	Barley	490 000
Harnessing common bean landraces, improved biofortified climbing bean varieties and underutilized climate smart legumes for sustainable and resilient agri-food systems in southwestern and western Uganda	Uganda	National Agricultural Research Organization (NARO)/National Crops Resources Research Institute (NaCRRI)	Beans, pigeon pea, garden pea, chickpea, lentil	240 904
Embracing South-South seed and knowledge sharing for resilient agroecosystems and improved livelihoods: South Sudan and Uganda	South Sudan, Uganda	National Agricultural Research Organisation - Plant Genetic Resources Centre (NARO-PGRC)	Common bean, cowpea, sorghum	598 652
Participatory conservation and utilization of root and tuber crop genetic resources for resilient farming systems and food security	Democratic Republic of the Congo, Burundi, Uganda	Institut Facultaire des Sciences Agronomiques de Yangambi (Agricultural University of Yangambi)	Cassava, sweet potato, taro, yam	599 000
Broadening the genetic base of taro (<i>Colocasia esculenta</i>) towards improved yield, disease and drought tolerance and developing market-driven products of taro to enhance the crop's commercial and food security value in Ghana	Ghana	University of Cape Coast	Taro	239 174
Enhancing local communities' capacity to adapt to climate changes	United Republic of Tanzania, Mozambique, Eswatini	Tanzania Plant Health and Pesticides Authority (TPHPA)	Pumpkin, finger millet, sorghum, bambara groundnut, cowpea, yam, common bean	600 000
Second phase				
Enabling and scaling open-source seed systems of beans, sorghum and finger millet for climate change	Kenya, Uganda, United Republic of Tanzania	Bioversity International on behalf of The Alliance of Bioversity international and CIAT	Common bean, finger millet, sorghum	564 000
Strengthening the conservation and sustainable use and management of selected climate resilient PGRFA to enhance smallholder farmer livelihoods	Lesotho, Malawi, Zimbabwe	Community Technology Development Trust (CTDT)	Sorghum, pearl millet, finger millet, beans, sunflower, pigeon pea, cow pea, potato	599 680

Title	Targeted countries	Executing institution	Crops addressed	Amount USD
GRULAC				
Establishing resilient community seed banks in the eastern dry corridor of El Salvador	El Salvador	Centro Nacional de Tecnología Agropecuaria y Forestal CEN-TA (National Centre for Agricultural and Forestry Technology CENTA)	Maize, sorghum, beans, sweet potato, sweet turnip	250 000
Regional articulation of the access and use of plant genetic resources adapted to family production systems	Plurinational State of Bolivia, Paraguay, Peru, Uruguay	Confederación de Organizaciones de Productores Familiares del MERCOSUR ampliado (COPRO-FAM)	Potato, quinoa, cassava, apple, pear, peach, plum, lotus, fescue, white clover, millet, bromus	574 500
Identification and reintroduction of legume genetic resources with drought and disease tolerance to contribute to food security and adaptability to climate change of family farming in the drylands of Chile	Chile	Instituto de investigaciones Agropecuarias	Beans, peas, lentil	235 020
Youth, citizen science and e-commerce: scaling integrated conservation solutions and farmers' rights by connecting key diversity hotspots	Plurinational State of Bolivia, Chile, Peru	International Potato Center (CIP), Andean Initiative	Potato, maize, quinoa	600 000
Agrobiodiversity zones as a genetic resources hotspot and resilient agrifood systems in the Andes of Peru	Peru	Instituto Nacional de Innovación Agraria – INIA, Peru	Potato, olluco, quinoa	250 000
Next generation sweet potato production in the Caribbean	Jamaica, Antigua and Barbuda, Saint Lucia	Inter-American Institute for Cooperation on Agriculture (IICA)	Sweet potato	583 000
Establishment of community seed banks of local and bio fortified varieties in seven communities in the north of the province of Coclé, Panama	Panama	Instituto de Innovación Agropecuaria de Panamá/ Sustainable Harvest International-Panama (SHI)	Rice, maize, sweet potato	49 901
Support network for local conservation (in situ/ on farm) of plant genetic resources in Brazil and integration with Embrapa genebanks	Brazil	Embrapa Recursos Genéticos e Biotecnología - Cenargen	Rice, maize, common bean, lima bean, cowpea, cassava, potato, sweet potato	198 716
Second phase				
Sustainable use of agro-biodiversity in Indigenous and peasant communities in Central America: A strategy for food security and climate adaptation	Guatemala, Honduras, Nicaragua, Costa Rica	Asociación de Organizaciones de los Cuchumatanes (ASOCUCH)	Maize, beans, potato, sorghum	573 461

Title	Targeted countries	Executing institution	Crops addressed	Amount USD
ASIA				
Enhancing conservation and utilization of plant genetic resources in Nepal for food and nutrition security under unpredictable climate (on-farm project)	Nepal	National Agriculture Genetic Resources Center (National Genebank), Nepal Agricultural Research council (NARC)	Amaranths, buckwheat, millets, lentil, naked barley, faba bean	247 500
Supporting and promoting conservation and sustainable use of plant genetic resources for food and agriculture in farming communities in the Philippines through participatory approaches, traditional variety reintroduction, capacity building, market innovation and digital communication platforms	Philippines	University of the Philippines Los Baños	Rice, indigenous vegetables	199 972
Engendering access for smallholder farmers to plant genetic resources for food and agriculture for conservation and sustainable use	Philippines	SEARICE	Rice, corn, sweet potato, cocoyam, kayos, banana, cassava, eggplant, squash, stringbean, pigeon pea, cowpea, apali, taro, yam	250 000
Enhancing the capacity of smallholder farmers to improve productivities and value-added to root/tuber crops for commercialization and sustainable development	Lao People's Democratic Republic	National Agriculture and Forestry Research Institute (NAFRI)	Taro, yam, sweet potato	250 000
EUROPE				
Strengthening linkages between in-situ/on-farm and ex-situ conservation of local PGRFA from Georgia and use for adaptation to climate change	Georgia	LEPL Scientific Research center of Agriculture (SRCA)	Wheat, bean, maize	250 000
NEAR EAST				
Improving food security in West Asia and North Africa by identifying and promoting climate-resilient wheat varieties resistant to soil-borne pathogens	Algeria, Jordan, Lebanon, Islamic Republic of Iran, Morocco, Syrian Arab Republic, Tunisia, Türkiye	International Maize and Wheat Improvement Center (CIMMYT)	Wheat	590 002
Scaling up community resilience to climate variability and change by promoting community-based conservation, utilization and management for PGR with a special focus on women and children in Yemen	Yemen	National Genetic Resources Center (NGRC)	Wheat, barley, maize, sorghum, millet, bean, pea, lentil	244 400
SOUTH WEST PACIFIC				
Raising the profile of breadfruit production in coastal and island food systems	Papua New Guinea	PNG National Agricultural Research Institute	Breadfruit	248 529
Increasing PGRFA diversity through agroforestry for social-cultural-economic and ecological benefits of 100 farmers in Fiji	Fiji	Ministry of forestry	Breadfruit, coconut, citrus, major aroids, yam, cassava, banana, plantain, beans, sweet potato, edible ferns, local nuts, fruits, other indigenous fruit trees	250 000

FINANCIAL CONTRIBUTIONS



TABLE 1: CONTRIBUTIONS TO THE BENEFIT-SHARING FUND

	USD	%
MLS USER-BASED INCOME		
Canadian seed company	3 187	
Nunhems Netherlands BV	356 273	
Beja Zaden BV	31 688	
Uniquet Pty Ltd	218	
Zollinger Bio	355	
Subtotal	391 721	1.11%
VOLUNTARY CONTRIBUTIONS		
CONTRACTING PARTIES		
Australia	1 588 815	
Austria	24 176	
Germany	587 896	
European Commission	5 565 907	
India	24 364	
Indonesia	100 000	
Ireland	659 800	
Italy	9 095 214	
Kingdom of the Netherlands	51 994	
Norway	11 349 527	
Spain	2 348,935	
Sweden	244 903	
Switzerland	222 461	
Subtotal	31 863 991	91%
PRIVATE SECTOR		
European Seed Association	339 751	
SEMAE	988 534	
International Seed Federation	49 280	
Subtotal	1 377 565 45	3.92%
INTERNATIONAL MECHANISMS AND FUNDS		
IFAD	1 500 000	
Subtotal	1 500 000	4.27%
NON-GOVERNMENTAL ORGANIZATIONS AND OTHERS		
ProSpecieRara Hauptsitz	991.67	
Subtotal	991.67	0.00%
INNOVATIVE INITIATIVES FROM INTERNATIONAL TREATY STAKEHOLDERS		
Other seed sales		
Seed trade licencing platform	6 416	
Subtotal	6 416	0.02%
GRAND TOTAL	35 140 685	100.00

TABLE 2:
AVAILABLE FUNDING TO THE FIFTH CYCLE
OF THE BENEFIT-SHARING FUND

MLS USER-BASED INCOME	USD	%
Canadian seed company	713	
Nunhems Netherlands BV	237 267	
Beja Zaden BV	31 688	
Uniquet Pty Ltd	218	
Zollinger Bio	355	
Subtotal	270 240	2.03
VOLUNTARY CONTRIBUTIONS		
CONTRACTING PARTIES		
European Commission	4 136 505	
Italy	2 200 727	
Kingdom of the Netherlands	51 994	
Switzerland	86 486	
Norway	4 008 016	
Subtotal	10 130 698	76.16
PRIVATE SECTOR		
SEMAE	773 811	
Subtotal	773 811	5.82
NON-GOVERNMENTAL ORGANIZATIONS AND OTHERS		
ProSpecieRara Hauptsitz	992	
Subtotal	992	0.01
INNOVATIVE INITIATIVES FROM INTERNATIONAL TREATY STAKEHOLDERS		
Norwegian initiative: 0.1% of national seed sales	447 254	
Subtotal	447 254	3.36
OTHER AVAILABLE FUNDS		
Unused funds from previous project cycles	1 679 546	
Subtotal	1 679 546	12.63
GRAND TOTAL	13 302 541	100.00

Note: The tables on pages 33 and 34 reflect the situation by July 2023.

Source: Author's own elaboration





PARTNERS

Implementing partners

The Benefit-sharing Fund facilitates increased cooperation among a wide range of stakeholders globally. Throughout four project cycles, the BSF has supported partnerships among more than 500 institutions, including farmers' organizations, national and international research institutes, NGOs, universities, extension services, institutes for biodiversity conservation, gene banks, governments, the United Nations and the private sector.

In the appraisal process for BSF-5, the Independent Panel of Experts prioritized proposals that are led by or strongly focus on the capacity building of national organizations. Around 75 percent of the approved projects are led by national organizations, including NARS, government institutions, universities and academia, NGOs and civil society organizations.

Funding partners

The two main sources of funding for the BSF are voluntary contributions

and user-based income from the International Treaty's Multilateral System.

Voluntary contributions to the BSF come from a diverse range of sources, including International Treaty Contracting Parties, the private sector, philanthropic organizations, international mechanisms and funds from innovative sources and mechanisms.

Multilateral System user-based income is generated from profits arising from specific crop varieties that have been developed using PGRFA material(s) that were accessed from the Multilateral System. A portion of the profits is deposited in the BSF, which is intended to generate a reasonable source of sustainable and predictable income. This in turn enables small-scale farmers, scientists and breeders in Member Countries to make use of the International Treaty's global gene pool for the further research and development of new PGRFA materials.

Contact

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of the United Nations**

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